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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,667	02/28/2002	Michael J. Luddy	I-2-0082.3US	3803
24374	7590	12/29/2004	EXAMINER	
VOLPE AND KOENIG, P.C. DEPT. ICC UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			TON, DANG T	
			ART UNIT	PAPER NUMBER
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DATE MAILED: 12/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/086,667	Applicant(s) LUDDY, MICHAEL J.	
	Examiner DANG T. TON	Art Unit 2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/28/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

1. The disclosure is objected to because of the following informalities:

Applicant should provide a status of all copending applications recited in the specification, page 1.

Appropriate correction is required.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,741,609. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following formalities:

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For claims 1-20, the claims 1-6 of U.S. Patent No. 6,741,609 discloses a method implemented by a subscriber unit for suppressing selective communications during communication rate modification, the subscriber unit being coupled between first and the second communicating nodes, the method comprising: establishing a communication channel between the first and the second nodes at a first data rate; detecting a transmission from the first node on the channel; determining whether the transmission requires a change in data rates to a second data rate; switching, responsive to the determining step, the communication channel to the second data rate; blocking, responsive to the determining step, transmissions from the second node until the second data rate has been established (see claim 1);

wherein the detecting step detects tones at a plurality of selective frequencies and the tones initiate a change to the second data rate (see claim 2);

wherein the switching step switches the first data rate to the second data rate, which is higher data rate than the first data rate(see claim 3) ;

wherein the first data rate is 32 kb/s and the second data rate is 64 kb/s(see claim 4) ;

wherein the first data rate employs pulse code modulation and the second data rate employs adaptive pulse code modulation (see claim 5); and

wherein the switching step is responsive to the determining step to switch the established channel to one of a plurality of alternative channels, depending upon a data rate and modulation type required by the transmission(see claim 6);

Claims 7-12 of U.S. Patent No. 6,741,609 discloses a method implemented by a subscriber unit for facilitating wireless communications between an originating node and a terminating node and for selectively adjusting transmission rates without the loss of data during the transmission rate adjustment, the subscriber unit being located such that at least a portion of the communication between the originating node and the terminating node passes through the subscriber unit, the method including:

establishing a first communication channel between the originating node and the terminating node, the channel comprising a first communication path from the originating node to the terminating node and a second communication path

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from the terminating node to the originating node; monitoring the first communication path for a signal, the signal indicating the request for a transmission rate adjustment; adjusting, responsive to the monitoring step, the transmission rate of the communication channel; and suppressing, responsive to the monitoring step, communications on the second communication path until the desired communication rate is established (see claim 7);

wherein the monitoring step detects signals having selective frequencies indicating a request for an increased transmission rate (see claim 8);

wherein the adjusting step switches the first communication channel to a second communication channel having a higher transmission rate (see claim 9);

wherein the first communication channel has a transmission rate of 32 kb/s and the second communication channel has a data rate of 64 kb/s (see claim 10);

wherein the first communication channel uses pulse

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code modulation and the second communication channel uses adaptive pulse code modulation(see claim 11);

wherein the signal indicates a transmission rate and a modulation type required and the adjusting step is responsive to the monitoring step to switch the channel to one of a plurality of alternative channels, depending upon a transmission rate and a modulation type required by the signal(see claim 12).

Claims 13-18 of U.S. Patent No. 6,741,609 discloses a method implemented by a wireless subscriber unit, which is interposed between a first communicating node and a second communicating node, for suppressing selective communications during channel modification, the method comprising:

establishing a first duplex communication channel between the first node and the second node comprising a transmit (Tx) portion and a receive (Rx) portion; the channel having a first communication rate and modulation type; detecting a transmission from the first node on the Tx portion; determining whether the transmission requires a change to a second duplex communication channel having a second communication rate and modulation type; switching the first communication channel

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to the second communication channel; and blocking transmissions on the Rx portion until the second communication channel is established(see claim 13);

wherein the detecting step detects selective transmitted frequencies on the Tx portion which indicate a requirement for a change to the second communication channel(see claim 14).

wherein the second communication rate is faster than the first communication rate(see claim 15);

wherein the first communication rate is 32 kb/s and the second communication rate is 64 kb/s(see claim 16).

wherein the first communication channel uses pulse code modulation and the second communication channel uses adaptive pulse code modulation(see claim 17).

wherein the switching step is responsive to the determining step to switch the established channel to one of a plurality of alternative channels, depending upon a communication rate and a modulation type required by the transmission(see claim 18).

Claim 19 of U.S. Patent No. 6,741,609 discloses a method implemented by a wireless subscriber unit for facilitating communications between a first communicating entity and a second communicating entity by selectively suppressing communications during bearer rate modification, the method comprising: establishing a communication channel between the first entity and the second entity; detecting a transmission from the first entity over the channel; determining if a new communication channel is required; switching over the communication channel to the new communication channel; and blocking transmissions from the second entity to the first entity until the switchover is completed(see claim 19).

Claim 20 of U.S. Patent No. 6,741,609 discloses a subscriber unit implementing a method of modifying its communication rate, the subscriber unit handling at least a portion of a communication between an originating node and a terminating node, the method comprising: receiving a first communication from the originating node at a first communication rate; detecting a request for a modification of the communication rate; modifying the first communication rate to the requested data communication rate;

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transmitting the first communication at the first communication rate to the terminating node; receiving an answering tone from the terminating node; and suppressing the answering tone until the modification is completed, and thereafter transmitting the answering tone to the originating node(see claim 20).

For claims 1-20, the claims 1-20 of U.S. Patent No. 6,741,609 disclose all the subject matter of the claimed invention with the exception disclosing apparatus claims (the claims 1-20 of U.S. Patent No. 6,741,609 disclose method claims). However using the method claims of patent to modify/implement the apparatus claims is well-known in the art since they perform the same function. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method claims as taught by the patent to implement the apparatus claims. The motivation for modifying the method claims 1-20 of U.S. Patent No. 6,741,609 into the apparatus claims being that it provides the apparatus performing the same function as the method claims.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

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unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 5,953,346 or claims 1-20 of U.S. patent number 6,744,781. Although the

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conflicting claims are not identical, they are not patentably distinct from each other because of the following:

For claims 1-20, the claims 1-6 patent number 5,953,346 or 6,744,781 disclose a system for suppressing selective communications during rate modification in a wireless communication network wherein the wireless communication network comprises a first communicating node, a second communicating node and the system located between the first and the second nodes, the system comprising:

means for establishing a communication channel between the first and the second nodes at a first data rate;

means for detecting a transmission from the first node on the channel;

means for determining whether the transmission requires a change in data rates to a second data rate;

switch means, responsive to the determining means, for switching the communication channel to the second data rate; and

blocking means, responsive to the determining means, for blocking transmissions from the second node until the second data rate has been established(see claim 1);

wherein the detecting means detects tones at a plurality of selective frequencies and the tones initiate a change to the second data rate(see claim 2);

wherein the switch means switches the first data rate to the second, higher data rate(see claim 3);

wherein the first data rate is 32 kb/s and the second data rate is 64 kb/s(see claim 4).

wherein the first data rate employs pulse code modulation and the second data rate employs adaptive pulse code modulation(see claim 5);

wherein the switch means is responsive to the determining means to switch the established channel to one of a plurality of alternative channels, depending upon a data rate and modulation type required by the transmission(see claim 6).

The claims 7-12 of patent number 5,953,346 or 6,744,781 disclose a wireless communication network having an originating node, a terminating node and a communication system located between the originating node and the terminating node, the

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communication system for selectively adjusting data transmission rates without the loss of data during the transmission rate adjustment, the system comprising:

means for establishing a communication channel between the originating node and the terminating node, the channel comprising a first communication path from the originating node to the terminating node and a second communication path from the terminating node to the originating node;

means for monitoring the first communication path for a signal, the signal indicating the request for a transmission rate adjustment;

adjustment means, responsive to the detection means, for adjusting the transmission rate of the communication channel; and suppression means, responsive to the detection means, for suppressing communications on the second communication path until the desired communication rate is established(see claim 7);

wherein the monitoring means detects signals having selective frequencies indicating a request for an increased data transmission rate(see claim 8).

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wherein the adjustment means switches the communication channel to a second communication channel having a higher data transmission rate(see claim 9);

wherein the communication channel has a data rate of 32 kb/s and the second communication channel has a data rate of 64kb/s(see claim 10).

wherein the communication channel uses pulse code modulation and the second communication channel uses adaptive pulse code modulation(see claim 11).

wherein the signal indicates a data rate and a modulation type required and the adjustment means is responsive to the monitoring means to switch the channel to one of a plurality of alternative channels, depending upon a data rate and a modulation type required by the signal(see claim 12).

The claims 13 of patent number 5,953,346 or 6,744,781 disclose a method for modifying the data transmission rate of a communication system within a wireless communication network, the network having an originating node, a terminating node and

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the communication system located between the originating node and the terminating node, the method comprising the steps of:

receiving a first communication from the originating node at a first data communication rate;

detecting a request for a modification of the data communication rate;

initiating a modification to the requested data communication rate;

transmitting the first communication at the first data rate to the terminating node;

receiving an answering tone from the terminating node;

suppressing the answering tone until the modification is completed;

completing the modification; and

transmitting the answering tone to the originating node (see claim 13).

The claims 14-19 of patent number 5,953,346 or 6,744,781 disclose a wireless communication network having a first communicating node, a second communicating node and a communication system located between the first node and the second node, the system for suppressing selective communications

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during channel modification in the communication network, the system comprising:

means for establishing a first duplex communication channel between the first node and the second node comprising a transmit (Tx) portion and a receive (Rx) portion; the channel having a first data communication rate and modulation type;

means for detecting a transmission from the first node on the Tx portion;

means for determining whether the transmission requires a change to a second duplex communication channel having a second data communication rate and modulation type;

switch means, responsive to the determining means, for switching the first communication channel to the second communication channel; and

blocking means, responsive to the determining means, for blocking transmissions on the Rx portion until the second communication channel is established(see claim 14);

wherein the detecting means detects selective transmitted frequencies on the Tx portion which indicate a requirement for a change to the second communication channel(see claim 15);

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wherein the second communication channel has a faster data rate than the first communication rate(see claim 16);

wherein the first data communication rate is 32 kb/s and the second data communication rate is 64 kb/s(see claim 17);

wherein the first data communication channel uses pulse code modulation and the second communication channel uses adaptive pulse code modulation(see claim 18);

wherein the switch means is responsive to the determining means to switch the established channel to one of a plurality of alternative channels, depending upon a data rate and a modulation type required by the transmission(see claim 19).

The claims 20 of patent number 5,953,346 or 6,744,781 disclose a wireless communication network having a first communicating entity, a second communicating entity and a communication system located between the first entity and the second entity, the system for suppressing selective

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communications during bearer rate modification in the communication network, the system comprising:

means for establishing a communication channel between the first entity and the second entity;

means for detecting a transmission from the first entity over the channel;

determining means responsive to the detecting means, determining if a new communication channel is required;

switch means, responsive to the determining means, for switching over the communication channel to the new communication channel;

blocking means, responsive to the determining means, for blocking transmissions from the second entity to the first entity until the switch over is completed(see claim 20).

For claims 1-20, the claims 1-20 of patent number 5,953,346 or 6,744,781 disclose all the subject matter of the claimed invention with the exception of using the subscriber unit in a communications network (claims 1-20 of the patent number 5,953,346 do teach using the communication network and the claims 1-20 of the patent number 6,744,781 do teach the base station). However, it is well-known the subscriber unit can be coupled to the first and second nodes. Thus, it would have been obvious to the person of ordinary skill in the art at the time

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of the invention to replace the communication network as taught by the patent with the subscriber unit . The motivation for using the subscriber unit in the communications network of the claims 1-20 of the patents 5,953,346 and 6,744,781 being that it provides a need for a simple and effective technique for switching the data transmission rate of the subscriber unit to the required rate while preserving the integrity of the data transmitted.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Luddy (6,608,825) is cited to show a system which is considered pertinent to the claimed invention.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANG T TON whose telephone number is 571-272-3171. The examiner can normally be reached on MON-WED, 5:30 AM-6:00 PM and Thur 5:30-9:30 A.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on 571-272-3174. The fax phone number for the

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organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Ton



DANG TON
PRIMARY EXAMINER